

REMARKS

Claims 1 through 8 and 10 through 18 are pending in this application. Claims 1 through 8 and 10 through 18 have been rejected under 35 U.S.C. §112, first paragraph. The Examiner rejected these claims with the assertion that the claims mentioned the printed circuit board bearing "a bore". Independent Claims 1, 6 and 12 have been amended to remove the word "bore" from the claims thereby removing any issue under the first paragraph of 35 U.S.C. §112.

Claims 1 through 8 and 10 through 18 have been rejected under 35 U.S.C. §112, second paragraph. The Examiner has indicated that the term "printed circuit board" has been used in such a way as one to believe that there is more than one printed circuit board. This in fact is correct. There are two printed circuit boards. One of the printed circuit boards is a flexible printed circuit board 22 while the other one is printed circuit board 10. To remove the confusion, Applicant has amended Claims 1 and 6 so that they are claimed as "a first printed circuit board" and "a second printed circuit board". Note that these printed circuit boards were already separately distinguished in that the "second" printed circuit board was claimed as a "printed circuit board assembly", thus no new matter is entered and the amendment does not require further consideration nor search. Claim 12 was not amended in this respect because Claim 12 discloses a flexible printed circuit board and a printed circuit board assembly, thus making the distinction between the two printed circuit boards. One of ordinary skill in the art should recognize that this terminology is acceptable and standard in head disk drive assemblies.

The Examiner has quoted from the Remarks of Applicant's previously filed Amendment of 22 October 1998, to show that there is confusion. The section quoted by the Examiner is incorrect. The section that is incorrect states that "there is a first connector that comprises both a first connector and a second connector and that there is a second connector that comprises both a plurality of contacts and a plurality of terminals." Instead, they should read "there is a first connector attached to a flexible printed circuit board 22 which is attached to the head disk drive assembly, said first connector containing contact lines 26. There is a second connector 11 having hook-like terminals 14 on printed circuit board 10." This should clarify the confusion noted by the Examiner on this issue.

The Examiner has rejected Claims 3 and 8 as being indefinite because they say "printed circuit board on said disk assembly being flexible." Applicant has amended Claims 3 and 8 so that they now read "said first printed circuit board being flexible". As a result of these amendments, Claims 1 through 8 and 10 through 18 are believed to be in compliance with the second paragraph of 37 C.F.R. §112.

Claims 1 through 8 and 10 through 18 were rejected under 35 U.S.C. §102 under Takagi *et al.*, U.S. Patent No. 5,508,860 and Morehouse *et al.*, U.S. Patent No. 5,768,049 for the reasons given in the first Office action (Paper No. 5). Claims 2, 4, 5, 7, 10, 11, 13, 14, 15 and 16 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Morehouse '049 in view of Kaufman *et al.*, U.S. Patent No. 5,199,884, as discussed in the first Office action. Applicant traverses these rejections.

As rejected, independent Claims 1, 6 and 12 include many features that are readily distinguishable from the prior art. In particular, as rejected (and further amended) Claim 1 states "said contact connectors of said second printed circuit board automatically electrically engaging said contacts on said disk assembly to transfer signals between said printed circuit board and said spindle motor when said second connector of said second printed circuit board is engaged with said first connector of said disk assembly." Claim 6 as rejected (and further amended) says "a plurality of terminals attached to said base and protruding to automatically abuttingly contact said contacts while said first connector is engaged with said second connector". Claim 12 as rejected (and further amended) states "a plurality of elastic terminals attached to said base and protruding to automatically abuttingly contact said contacts on said disk assembly while said first connector is engaged with said second connector." These distinctions may not be summarily ignored under § 103 because the prior art does not teach Applicant's structure that advantageously enables two pairs of connectors to automatically engage one another when a printed circuit board is attached to a head/disk assembly.

Neither of the three references, Takagi '860, Morehouse '049 and Kaufman '884 that form the alternative proposed combinations disclose two pairs of connectors, that automatically electrically connect when placed together for a hard disk drive apparatus. For these reasons, Applicant contends that Applicant's claims are distinguished from the previously cited prior art references used by the Examiner.

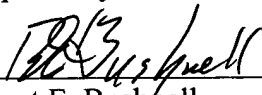
The introduction of a first and a second printed circuit board along with the addition of stating that the contacts automatically electrically connect upon assembly of the hard disk drive do not constitute new matter and thus should be considered for examination. The term "automatically" was in the original set of claims as filed, and the first and second printed circuit boards were a printed circuit board and a printed circuit board assembly. As a result, this amendment does not require further consideration nor search.

It is respectfully requested that the Examiner allow Claims 1 through 8 and 10 through 18 to pass onto issue.

No fee is incurred by this Amendment.

In view of the foregoing amendments, arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone the Applicant's attorney.

Respectfully submitted,



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